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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,648	12/29/2000	Gregory Cummings	42390P9329	1497

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EXAMINER	
BRANCOLINI, JOHN R	
ART UNIT	**PAPER NUMBER**
2153	4

DATE MAILED: 02/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/752,648	CUMMINGS ET AL.	
	Examiner	Art Unit	
	John R Brancolini	2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 December 2000*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-29* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 December 2000* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claims 1-29 are pending in the application.

Priority

No claim for priority has been made. The effective filing date is December 29, 2000.

Specification

The disclosure is objected to because of the following informalities: A "Brief Summary of the Invention" is missing. According to 37 CFR 1.77, a "Brief Summary of the Invention" should follow the "Background of the Invention".

Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-2, 4-12, 14-18, 20-24, 26-29 are rejected under 35 U.S.C. 102(e) as being anticipated by Kenner et al. (US Patent Number 6269394), hereinafter referred to as Kenner.

In regards to claim 1, Kenner discloses a method, comprising:

- Receiving a request for data from a requesting system, the requesting system having a corresponding address (the PIM, or primary index manager, receives a request from a user workstation which has an associated network address, col 8 lines 58-66).
- Selecting one of a plurality of edge servers having the requested data, said selecting being based on the requesting system's address (after receiving the request, the PIM selects a server that contains the requested data based on the requesting systems address, col 11 lines 34-46).
- Causing the requested data to be sent from a selected edge server (the data is sent from the remote storage unit to the requesting unit, col 11 lines 41-46).

In regards to claim 2, Kenner discloses selecting an edge server having the requested data based on the requesting system's address comprises looking up the address in a site database having a predetermined list of addresses each corresponding to an edge server that is the nearest streaming server to a requesting system corresponding to a given address, and selecting an edge server corresponding to the address (the PIM maintains a database containing the addresses of the edge servers as well as a listing of the servers contents to allow the nearest server to stream the data to the requesting unit, col 4 line 55 – col 5 line16, col 10 lines 55-65).

In regards to claim 4, Kenner discloses the address comprises an IP (Internet Protocol) address (Col 22 lines 20-68, the top table indicates that a User ID is stored which is used to identify a user, also the lower table indicates that listing of all IP addresses are stored).

In regards to claim 5, Kenner discloses causing the requested data to be sent from the selected edge server comprises redirecting the requesting system to the selected edge server (a routing message is created by the index manager, and this is forwarded to the user allowing the requesting system access to the remote server, col 11 lines 34-40).

In regards to claim 6, Kenner discloses the request for data comprises a request for media data (the invention is directed towards video clip storage and retrieval, col 7 lines 12-15).

In regards to claim 7, Kenner discloses the request for media data comprises a request for live media data (the search and retrieval unit, or SRU, can stream video in real time allowing for live media data, col 10 lines 9-18).

In regards to claim 8, Kenner discloses causing the requested data to be sent from a selected edge server comprises:

- Connecting the selected edge server to an origin server receiving the live media data (the PIM connects a storing server to the origin server to obtain a copy of the data, col 16 lines 45-51).
- Sending the live media data from the origin server to the selected edge server (a new clip is stored by the server of origin of the media data sends the clip to the PIM which sends the clip to a storing server, col 16 lines 45-51).

In regards to claim 9, Kenner discloses a method comprising:

- Receiving a request for data from a requesting system, the requesting system having a corresponding address (the PIM, or primary index manager, receives a request from a user workstation which has an associated network address, col 8 lines 58-66).
- Looking up the address on a site database, the database having predetermined addresses each corresponding to an edge server that is the nearest streaming server to the requesting system corresponding to the address (after receiving the request, the PIM selects a server that contains the requested data based on the requesting systems address, col 11 lines 34-46).
- If the address exists on the site database, causing the requested data to be sent from the edge server corresponding to the address of the requesting system (the data is sent from the remote storage unit to the requesting unit, col 11 lines 41-46).

In regards to claim 10, Kenner discloses if the address doesn't exist on the database, causing the requested data to be sent from a deployment server to the requesting system, the deployment server being selected based on a non-address based protocol (if an unknown user requests data, a local retrieval unit is created that finds and downloads the data and then transfers the data to the user based on a non-address based protocol, but rather on geographic locality, col 9 lines 29-42).

In regards to claim 11, Kenner discloses causing the requested data to be sent from the selected edge server comprises redirecting the requesting system to the selected edge server (a routing message is created by the index manager, and this is forwarded to the user allowing the requesting system access to the remote server, col 11 lines 34-40).

In regards to claim 12, Kenner discloses redirecting the requesting system to the selected edge server comprises sending location information to the requesting system, the location information comprising the address of the selected edge server and the location of the requested data on the selected edge server (a routing message is created by the index manager, and this is forwarded to the user allowing the requesting system access to the remote server, col 11 lines 34-40).

In regards to claim 14, Kenner discloses a machine-readable medium having stored thereon data representing sequences of instructions, the sequences of instructions which, when executed by a processor, cause the processor to:

- Receive a request for data from a requesting system, the requesting system having a corresponding address (the PIM, or primary index manager, receives a request from a user workstation which has an associated network address, col 8 lines 58-66).
- Select one of a plurality of edge servers having the requested data, said selecting being based on the requesting system's address (after receiving the request, the PIM selects a server that contains the requested data based on the requesting systems address, col 11 lines 34-46).
- Cause the requested data to be sent from a selected edge server (the data is sent from the remote storage unit to the requesting unit, col 11 lines 41-46).

In regards to claim 15, Kenner discloses the processor selects an edge server having the requested data based on the requesting system's address by looking up the address in a site database having a predetermined list of addresses each corresponding to an edge server that is the nearest streaming server to a requesting system corresponding to a given address, and by selecting an edge server corresponding to the address (the PIM maintains a database containing the addresses of the edge servers as well as a listing of the servers contents to allow the nearest

server to stream the data to the requesting unit, col 4 line 55 – col 5 line16, col 10 lines 55-65).

In regards to claim 16, Kenner discloses the address comprises an IP (Internet Protocol) address (Col 22 lines 20-68, the top table indicates that a User ID is stored which is used to identify a user, also the lower table indicates that listing of all IP addresses are stored).

In regards to claim 17, Kenner discloses apparatus comprising:

- At least one processor (the user terminal is a workstation or a personal computer, either of which would contain a processor, col 8 lines 58-59)
- A machine-readable medium having instructions encoded thereon, which when executed by the processor, are capable of directing the processor to:
    - Receive a request for data from a requesting system, the requesting system having a corresponding address (the PIM, or primary index manager, receives a request from a user workstation which has an associated network address, col 8 lines 58-66).
    - Select one of a plurality of edge servers having the requested data, said selecting being based on the requesting system's address (after receiving the request, the PIM selects a server that contains the requested data based on the requesting systems address, col 11 lines 34-46).

- Cause the requested data to be sent from a selected edge server (the data is sent from the remote storage unit to the requesting unit, col 11 lines 41-46).

In regards to claim 18, Kenner discloses the processor selects an edge server having the requested data based on the requesting system's address by looking up the address in a site database having a predetermined list of addresses each corresponding to an edge server that is the nearest streaming server to a requesting system corresponding to a given address, and by selecting an edge server corresponding to the address (the PIM maintains a database containing the addresses of the edge servers as well as a listing of the servers contents to allow the nearest server to stream the data to the requesting unit, col 4 line 55 – col 5 line16, col 10 lines 55-65).

In regards to claim 20, Kenner discloses the address comprises an IP (Internet Protocol) address (Col 22 lines 20-68, the top table indicates that a User ID is stored which is used to identify a user, also the lower table indicates that listing of all IP addresses are stored).

In regards to claim 21, Kenner discloses an apparatus comprising:

- Means for receiving a request for data from a requesting system, the requesting system having a corresponding address (the PIM, or primary index manager,

receives a request from a user workstation which has an associated network address, col 8 lines 58-66).

- Means for selecting one of a plurality of edge servers having the requested data, said selecting being based on the requesting system's address (after receiving the request, the PIM selects a server that contains the requested data based on the requesting systems address, col 11 lines 34-46).
- Means for causing the requested data to be sent from a selected edge server (the data is sent from the remote storage unit to the requesting unit, col 11 lines 41-46).

In regards to claim 22, Kenner discloses the means for selecting an edge server having the requested data based on the requesting system's address comprises means for looking up the address in a site database having a predetermined list of addresses each corresponding to an edge server that is the nearest streaming server to a requesting system corresponding to a given address, and means for selecting an edge server corresponding to the address (the PIM maintains a database containing the addresses of the edge servers as well as a listing of the servers contents to allow the nearest server to stream the data to the requesting unit, col 4 line 55 – col 5 line16, col 10 lines 55-65).

In regards to claim 23, Kenner discloses the address comprises an IP (Internet Protocol) address (Col 22 lines 20-68, the top table indicates that a User ID is stored

which is used to identify a user, also the lower table indicates that listing of all IP addresses are stored).

In regards to claim 24, Kenner discloses an apparatus comprising:

- A site database having predetermined addresses each corresponding to an edge server that is the nearest edge server to a requesting system corresponding to a given address (the PIM maintains a database containing the addresses of the edge servers as well as a listing of the servers contents to allow the nearest server to stream the data to the requesting unit, col 4 line 55 – col 5 line16, col 10 lines 55-65).
- A redirection server coupled to the site database to:
    - Lookup an address on the site database, the address corresponding to a requesting system from which a request for data is received (after receiving the request, the PIM selects a server that contains the requested data based on the requesting systems address, col 11 lines 34-46).
    - Cause requested data to be sent from an edge server corresponding to an address of a requesting system (the data is sent from the remote storage unit to the requesting unit, col 11 lines 41-46).

In regards to claim 26, Kenner discloses the address comprises an IP (Internet Protocol) address (Col 22 lines 20-68, the top table indicates that a User ID is stored

which is used to identify a user, also the lower table indicates that listing of all IP addresses are stored).

In regards to claim 27, Kenner discloses a system comprising:

- A requesting system to request data, the requesting system having a corresponding address (the PIM, or primary index manager, receives a request from a user workstation which has an associated network address, col 8 lines 58-66).
- An operations center coupled to the requesting system to handle requests from the requesting system (The PIM acts as an operations center to handle requests), the operations center having:
    - A site database having a predetermined a list of addresses each corresponding to an edge server that is the nearest edge server to a requesting system corresponding to a given address (the PIM maintains a database containing the addresses of the edge servers as well as a listing of the servers contents to allow the nearest server to stream the data to the requesting unit, col 4 line 55 – col 5 line16, col 10 lines 55-65).
    - A redirection module to cause requested data to be sent from an edge server corresponding to the requesting system's address to the requesting system (a routing message is created by the index manager, and this is forwarded to the user allowing the requesting system access to the remote server, col 11 lines 34-40).

- One or more edger servers to send data to the requesting system (Fig. 4 shows several SRUs, which are servers that store, send and receive data).

In regards to claim 28, Kenner discloses the requesting system comprises a viewer, and said redirection module causes requested data to be sent from an edge server to a requesting system comprises initiating a dialog session between the viewer and the edge server (in one embodiment, Kenner shows the invention being used to watch videos for a real estate company where the user has a viewer installed in a browser, and a dialog session is also utilized to allow the user to access text data that corresponds to the video, col 18 line 64 – col 19 line 43).

In regards to claim 29, Kenner discloses the address comprises an IP (Internet Protocol) address (Col 22 lines 20-68, the top table indicates that a User ID is stored which is used to identify a user, also the lower table indicates that listing of all IP addresses are stored).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3, 13, 19, 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kenner in view of Alkhatib (US Patent Number 6119171).

In regards to claims 3, 13, 19, and 25, Kenner fails to disclose the feature of using a predetermined list of CIDR (Classless Inter-Domain Routing) blocks corresponding to the address of an edge server.

Alkhatib discloses a system of domain name routing where the feature of utilizing CIDR blocks is discussed. Alkhatib teaches using CIDR blocks as a solution to the depleting IP address problem currently facing networks. Utilizing CIDR blocks allocates a series of Class C network addresses in the place of a Class B network to slow the consumption of Class B network addresses (col 2 lines 1-12).

It would have been obvious to one of ordinary skill in the art at the time of invention to modify Kenner to include utilizing CIDR blocks as taught by Alkhatib as a solution to the depleting IP address problem currently facing networks.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Leighton et al. (US Patent Number 6108703), a global hosting system that utilizes edge servers for global content distribution.

Silton et al. (US Patent Number 6335926), a system of edge servers and forwarders to provide local sharing and standby features.

Leighton et al. (US Patent Number 6553413), a content delivery network using edge servers to allow location based content access on a global scale.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John R Brancolini whose telephone number is (703) 305-7107. The examiner can normally be reached on M-Th 7am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (703) 305-4792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JRB

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